

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of

Alexander C. Schmidt, Mario H. Skiadopoulos, Peter L. Collins, Brian K. Murphy,  
Jane E. Bailly, Anna P. Durbin

Serial No. 09/586,479

Group Art Unit: 1648

Filing Date: June 1, 2000

Examiner: S. Brown

For: ATTENUATED HUMAN-BOVINE CHIMERIC PARAINFLUENZA  
VIRUS (PIV) VACCINES

DATE OF DEPOSIT: 4/12/2002  
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Jeffrey J. King  
REGISTRATION NO. 38,515

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Commissioner for Patents  
Washington DC 20231

POWER TO INSPECT AND MAKE COPIES

The undersigned hereby authorizes Wayne Croteau, Christina Mraz and  
Doreen Watson to inspect and make copies of the file history of the above-identified  
application.

Date: 4/12/2002

Jeffrey J. King  
Registration No. 38,515

Woodcock Washburn LLP  
One Liberty Place - 46th Floor  
Philadelphia PA 19103  
Telephone: (215) 568-3100  
Facsimile: (215) 568-3439

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## In Re Application of:

Alexander C. Schmidt et al.

Serial No.: 09/586,479

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REGISTRATION NO.: 38,515

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Commissioner for Patents  
Washington, DC 20231

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ESTABLISHMENT OF RIGHT OF ASSIGNEE TO TAKE ACTION  
AND  
REVOCATION AND POWER OF ATTORNEY

Dear Sir:

The undersigned is empowered to act on behalf of the assignee below (the "Assignee"). The original assignment was recorded in the United States Patent and Trademark Office on September 25, 2000 at Reel 011182, Frame 0053. A copy of that submission is attached. This Assignment represents the entire chain of title of this invention from the Inventors Alexander C. Schmidt, Mario H. Skiadopoulos, Peter L. Collins, Brian R. Murphy, Jane E. Bailly, and Anna P. Durbin to the Assignee.

I declare that all statements made herein are true, and that all statements made upon information and belief are believed to be true, and further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001, and that willful, false statements may jeopardize the validity of the application, or any patent issuing thereon.

The undersigned hereby revokes any previous powers of attorney in the subject application, and hereby appoints the below listed registrants of National Institutes of Health Offices of Technology Transfer, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852, telephone (301) 496-7056, as its agents and attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith. This appointment is to be to the exclusion of the inventor(s) and his/her/their attorney(s) in accordance with the provisions of 37 C.F.R. § 3.71.

<u>James C. Haight</u>	Reg. No. <u>25,588</u>
<u>David R. Sadowski</u>	Reg. No. <u>32,808</u>
<u>Jack Spiegel</u>	Reg. No. <u>34,477</u>
<u>Susan S. Rucker</u>	Reg. No. <u>35,762</u>
<u>Stephen Finley</u>	Reg. No. <u>36,357</u>
<u>Steven Ferguson</u>	Reg. No. <u>38,488</u>
<u>John Peter Kim</u>	Reg. No. <u>38,514</u>
<u>Norbert Pontzer</u>	Reg. No. <u>40,777</u>
<u>Richard U. Rodriguez</u>	Reg. No. <u>45,980</u>
<u>Marlene Shinn</u>	Reg. No. <u>46,005</u>
<u>Dale Berkley</u>	Reg. No. <u>32,319</u>
<u>Catherine M. Joyce</u>	Reg. No. <u>40,668</u>

The National Institutes of Health Office of Technology Transfer has been duly delegated responsibility for such patent matters under the authority of the Department of Health and Human Services Secretary Louis W. Sullivan's May 21, 1991, memorandum appearing in the Friday, June 7, 1991, Federal Register Notices at Vol. 56, No. 110, pp. 26418-26419. The undersigned is authorized to exercise such authority in this matter.

Done on this 11 day of MARCH, 2002, at Rockville, Maryland.

UNITED STATES DEPARTMENT OF  
HEALTH AND HUMAN SERVICES

By: Jack Spiegel

Printed Name: JACK SPIEGEL

Registration No.: 34,477

for: Dr. Jack Spiegel, Director, *DTDT*  
Office of Technology Transfer  
National Institutes of Health  
6011 Executive Boulevard, Suite 325  
Rockville, MD 20852  
Telephone (301) 496-7056  
Facsimile (301) 402-0220

DHHS CASE NO. E-115-00/0

15280-3991004



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

JJ King



\*101499739A\*

1000 TOWNSEND & TOWNSEND  
1000 TOWNSEND & TOWNSEND  
DECEMBER 22, 2000 8:00 AM  
CC DEC 23 AM 8:00

PTAS  
TOWNSEND AND TOWNSEND AND CREW LLP  
JEFFREY J. KING  
TWO EMBARCADERO CENTER, 8TH FLOOR  
SAN FRANCISCO, CA 94111-3834

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 09/25/2000

REEL/FRAME: 011182/0053  
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

SCHMIDT, ALEXANDER C.

DOC DATE: 08/31/2000

ASSIGNOR:

SKIADOPOULOS, MARIO H.

DOC DATE: 08/31/2000

ASSIGNOR:

COLLINS, PETER L.

DOC DATE: 09/01/2000

ASSIGNOR:

MURPHY, BRIAN R.

DOC DATE: 08/31/2000

ASSIGNOR:

BAILLY, JANE E.

DOC DATE: 09/11/2000

ASSIGNOR:

DURBIN, ANNA P.

DOC DATE: 09/05/2000

011182/0053 PAGE 2

ASSIGNEE:

HEALTH AND HUMAN SERVICES,  
GOVERNMENT OF THE UNITED STATES  
OF AMERICA, AS REPRESENTED BY  
THE DEPARTMENT OF, THE  
6011 EXECUTIVE BOULEVARD, SUITE  
325  
ROCKVILLE, MARYLAND 20852-3804

SERIAL NUMBER: 09586479  
PATENT NUMBER:

FILING DATE: 06/01/2000  
ISSUE DATE:

MARY BENTON, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

10-31-2000


 Attorney Docket No. 15280-399100US  
 DHHS Ref. No. E-115-00/0

 FORM PTO-1595  
 (Rev. 6-93)

101499739

 U.S. Department of Commerce  
 Patent and Trademark Office

To the Honorable Asst. Commissioner for Patents. Please record the attached original documents or copy thereof

## 1. Name of conveying party(ies):

 Alexander C. Schmidt  
 Mario H. Skiadopoulos  
 Peter L. Collins  
 Brian R. Murphy  
 Jane E. Bailly  
 Anna P. Durbin

9-2560

 Additional name(s) of conveying parties attached? ☐ Yes  
☒ No.

## 2. Name and address of receiving party(ies)

 Name: The Government of the United States of America, as  
 represented by the Department of Health and  
 Human Services

EP 25

Internal Address:

Street Address: 6011 Executive Boulevard, Suite 325

City: Rockville State: Maryland ZIP: 20852-3804

## 3. Nature of conveyance:

- ☒ Assignment ☐ Merger
- ☐ Security Agreement ☐ Change of Name
- ☐ Other:

 Execution Date(s): August 31, 2000, September 1, 2000,  
 September 5, 2000 and September 11, 2000

 Additional names and addresses attached? ☐ Yes ☒ No

## 4. Application Number(s) or Patent Numbers.

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No(s): 09/586,479

B. Patent No(s):

 Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

 Name: Jeffrey J. King  
 TOWNSEND AND TOWNSEND AND CREW LLP  
 Two Embarcadero Center, 8<sup>th</sup> Floor  
 San Francisco, California 94111-3834  
 (206) 467-9600

## 6. Total number of applications and patents involved 1

7. Total fee (37 CFR 3.41): \$40

☐ Enclosed ☒ Charge Fees to Deposit Account

☒ Charge any additional fees associated with this paper or during  
 the pendency of this application, or credit any overpayment, to  
 deposit account.

8. Deposit account number: 20-1430

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## 9. Statement and signature.

 To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true of copy of the  
 original document.

 Jeffrey J. King  
 Name of Person Signing

Signature

Date

Atty Reg. No. 38,515

Total number of pages including cover sheet, attachments and document 6

10. Change Correspondence Address to that of Part 5? ☒ Yes ☐ No

OMB N . 0651-0011 (exp. 4/94)

Do not detach this portion

Mail documents to be recorded with required cover to:

 Asst. Commissioner for Patents  
 Box: Assignments  
 Washington, D.C. 20231

ASSIGNMENT

JOINT

WHEREAS, We, Alexander C. Schmidt, of 1831 Belmont Road #203 NW, Washington, DC 20009, Mario H. Skiadopoulos, of 8303 Aqueduct Road, Potomac, MD 20854, Peter L. Collins, of 12304 Village Square, Apt. #401, Rockville, MD 20852, Brian R. Murphy, of 5410 Tuscarawas Road, Bethesda, MD 20816, Jane E. Bailly, of 263 Congressional Ln. #501, Rockville, MD 20852, Anna P. Durbin, of 806 Hudson Avenue, Takoma Park, MD 20912, hereinafter referred to as "Assignors," employees of the Department of Health and Human Services at the time the invention was made, have invented: ATTENUATED HUMAN-BOVINE CHIMERIC PARAINFLUENZA VIRUS (PIV) VACCINES, for which an application to the Assistant Commissioner for Patents for grant of Letters Patents of the United States of America has been executed by the undersigned

☒ is identified as U.S. Patent Application:  
Serial No. 09/536,479

Filed June 1, 2000; and

WHEREAS, the conditions under which said invention was made are such as to entitle the Government of the United States of America under Paragraph 1(a) of Executive Order 10096, to the entire right, title, and interest herein, both domestic and foreign; and

WHEREAS, the Government of the United States of America is desirous of acquiring all domestic and foreign right, title, and interest in the aforesaid invention described in the aforesaid application for Letters Patent of the United States of America; and

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the premises and other valuable considerations, we the undersigned, have sold, assigned, and transferred and by these presents do sell, assign, and transfer unto The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services (hereinafter THE GOVERNMENT), and his successors, the full and exclusive right, title, and interest throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file the invention described in the aforesaid application for Letters Patent of the United States of America, and all Letters Patents and Registrations which may be granted on the same in the United States of America and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

AND, we hereby authorize and request the Assistant Commissioner for Patents to issue said Letters Patent to THE GOVERNMENT as assignee of the entire right, title, and interest in and to the same throughout the United States of America, its territories and dependencies, and within each and every foreign country in which THE GOVERNMENT elects to file, for the sole use for the full term or terms for which said Letters Patent and Registrations may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof which may be granted as fully and entirely as the same would have been held by us, had this assignment not been made;

AND, we hereby warrant that there are no outstanding assignments, grants, liens, encumbrances, or agreements either written, oral, or implied with respect to the aforesaid application for Letters Patent which will impair, diminish, limit, or abridge the interest herein conveyed at the time of the execution of this instrument by us;



## Assignment

Attorney Docket No.: 15280-399100US

DHHS Ref. No.: E-115-00/0

Page 2

AND, we hereby agree to execute any and all applications for Letters Patent in the United States of America and foreign countries, and to furnish and deliver to the Secretary, Department of Health and Human Services, upon request, all data and documents, and to execute any papers which may be necessary for the prosecution of any application or applications of Letters Patent or for THE GOVERNMENT to exercise its rights granted hereunder, including communicating to THE GOVERNMENT, its representatives or agents, any facts relating to said invention, including evidence for interference purposes, or for other proceedings, whenever requested, to testify in any interference or other proceedings, whenever requested, and to execute and deliver on request all lawful papers required to make any of the foregoing provisions effective, and likewise make these provisions binding upon our heirs, legal representatives, administrators and assigns, and we shall assist THE GOVERNMENT in every way as may be requested in protecting said invention, provided that any expense of extending such assistance shall be paid by THE GOVERNMENT.

The undersigned hereby grants THE GOVERNMENT or the law firm of Townsend and Townsend and Crew LLP, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated:

8/31/2000Alexander C. Schmidt

Alexander C. Schmidt

STATE OF MARYLAND )

ss.

COUNTY OF MONTGOMERY )

UNITED STATES OF AMERICA

On 31st before me, Rita Capobianchi (name of notary public), personally appeared Alexander C. Schmidt, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Rita A. Capobianchi  
NOTARY PUBLICMy Commission Expires: 2/2/2002

Assignment

Attorney Docket No.: 15280-399100US

DHHS Ref. No.: E-115-00/0

Page 3

Dated: 08/31/00

Mario H. Skiadopoulos  
Mario H. Skiadopoulos

STATE OF MARYLAND )

COUNTY OF MONTGOMERY )

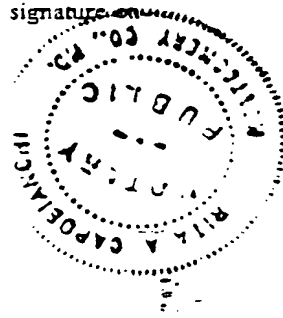
ss.

UNITED STATES OF AMERICA

On 31st, before me, Pete Capobianchi (name of notary public), personally appeared Mario H. Skiadopoulos, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Pete A. Capobianchi  
NOTARY PUBLIC  
My Commission Expires: 2/1/2002

Dated: 9/1/00

Peter L. Collins  
Peter L. Collins

STATE OF MARYLAND )

COUNTY OF MONTGOMERY )

ss.

UNITED STATES OF AMERICA

On 1st September, before me, Hoda Nasr (name of notary public), personally appeared Peter L. Collins, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

HODA NASR  
NOTARY PUBLIC STATE OF MARYLAND  
My Commission Expires March 22, 2004

NOTARY PUBLIC  
My Commission Expires: 1

Assignment

Attorney Docket No.: 15280-399100US

DHHS Ref. No.: E-115-00/0

Page 4

Dated:

8/31/00

  
Brian R. Murphy

STATE OF MARYLAND )

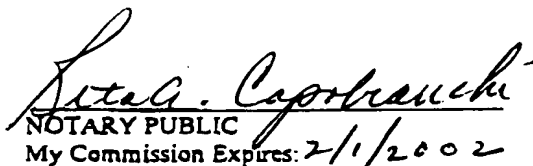
COUNTY OF MONTGOMERY )

ss.

UNITED STATES OF AMERICA

On 31st, before me Rita Caporinchi (name of notary public), personally appeared Brian R. Murphy, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.


  
NOTARY PUBLIC  
My Commission Expires: 2/1/2002

Dated:

9/11/00

California  
STATE OF ~~MARYLAND~~ )  
Alameda )  
COUNTY OF ~~MONTGOMERY~~ )

ss.

UNITED STATES OF AMERICA

On September 11, 2000, before me, Rita Comes (name of notary public), personally appeared Jane E. Bailly, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

NOTARY PUBLIC

My Commission Expires: Aug 7, 2002

Assignment

Attorney Docket No.: 15280-399100US

DHHS Ref. No.: E-115-00/0

Page 5

Dated: Sept 5, 2000  
Anna P. Durbin

STATE OF MARYLAND )

COUNTY OF MONTGOMERY )

ss.

UNITED STATES OF AMERICA

On September 5<sup>th</sup> before me Robert L. Bloom (name of notary public), personally appeared Anna P. Durbin, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

  
NOTARY PUBLICMy Commission Expires: Nov, 21, 2000

SE 5004251 v1

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## In Re Application of:

Alexander C. Schmidt et al.

Serial No.: 09/586,479

Group Art Unit: 1648

Filing Date: June 1, 2000

Examiner: S. Brown

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VIRUS (PIV) VACCINESCommissioner for Patents  
Washington, DC 20231RECEIVED  
TECH CENTER 1600/2900  
02 APR 16 PM 1:50ASSOCIATE POWER OF ATTORNEY

Sir:

The undersigned attorney of record, pursuant to the provisions of 37 C.F.R. §§ 1.33 and 1.34, and M.P.E.P. §402.02, hereby appoints the registrants of Woodcock Washburn LLP, One Liberty Place, 46<sup>th</sup> Floor, Philadelphia, Pennsylvania 19103, telephone (215) 568-3100, as its agents and attorneys to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith.

Done on this 11 day of MARCH, 2002, at Rockville, Maryland.UNITED STATES DEPARTMENT OF  
HEALTH AND HUMAN SERVICESBy: Jack SpiegelPrinted Name: JACK SPIELERRegistration No.: 34,477for: Dr. Jack Spiegel, Director, DTOT  
Office of Technology Transfer  
National Institutes of Health  
6011 Executive Boulevard, Suite 325  
Rockville, MD 20852  
Telephone (301) 496-7056  
Facsimile (301) 402-0220

DHHS CASE NO. E-115-00/0

54775-1